# **REMARKS/ARGUMENTS**

In this amendment, claim 13 is being amended, claims 17 and 18 are being canceled, and no claims are being added. Thus, after entry of this amendment, claims 1-16 will be pending in the application, with claim 9 being withdrawn from consideration.

Reconsideration and allowance of this application is respectfully requested in view of the amendment above and the remarks below.

### **Claim Objections**

The Office Action objected to claims 14-16 under 37 CFR 1.75(a) as allegedly being inconsistent with the specification. Applicants respectfully traverse the objection, and instead propose to amend claim 13 for clarification.

In reviewing the Examiner's suggested changes to claims 14-16 and the stated rationale, including the reference to claim 13, the undersigned believes those changes are based on a misunderstanding of claim 13 and of the functionality of the auxiliary switch set forth in objected-to claims 14-16. The "abrupt change" of claim 13 should be considered to be distinct from the "abrupt change" of claim 1, insofar as the former is caused by the auxiliary switch "to simulate a condition where the tip contacts the input surface", whereas the latter necessarily occurs "when the tip of the stylus sufficiently contacts the input surface". This distinction is reiterated at the top of page 10 of the specification, where it is explained that the auxiliary switch activates or changes properties of the emitted light beam "regardless of whether a tip switch ... is activated". Therefore, claim 13 is being amended to refer to "another abrupt change" to avoid confusion with the "abrupt change" mentioned in claim 1, even though the "another abrupt change" may have the very same effect on the light beam as the "abrupt change". Claim 13 is also being amended to refer to a change "in the property of the light beam" for better antecedent basis and consistency with base claim 1. No new matter has been added.

In contrast to claim 13, claims 14-16 were drafted <u>without</u> the stipulation that the recited functionality of the auxiliary switch "simulate[s] a condition where the tip contacts the input surface". Hence, the "changes" referred to in claims 14-16 may or may not

simulate a condition where the tip contacts the input surface, and thus may or may not be "abrupt". Applicants at this time decline to further limit claims 14-16 in the manner suggested by the Examiner, and respectfully request that the objections to claims 14-16 be withdrawn.

## Claim Rejections - § 112

The Office Action rejected claims 17 and 18 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Without acquiescing to the Examiner's objection, Applicants are canceling claims 17 and 18 as being unnecessary, and in order to expedite and streamline prosecution. The rejection is rendered moot and should be withdrawn.

## Claim Rejections - § 102

The Office Action rejected claims 1-5 and 11-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,100,538 (Ogawa). This rejection cannot be sustained.

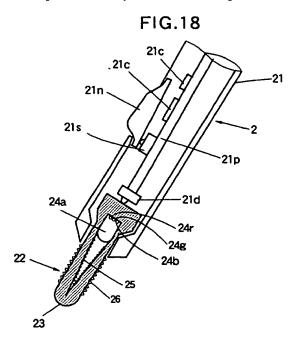
In order to anticipate a claim, a reference must teach each and every element of the claim. Claim 1 specifies, among other things, that the change to the property of the light beam (when the tip of the stylus sufficiently contacts the input surface) is "abrupt". The present specification includes a discussion of this term near the top of page 5:

"The change to the light beam exhibited when tip 112 contacts input surface 122 is a distinct, abrupt change that is detectable by the light sensors to distinguish between hover mode and inking mode. An abrupt change is distinguished from a smooth, continuous, and incremental change, such as the difference in beam width in the plane of the detectors when a non-collimated beam source is moved from just above an input surface to contacting the input surface."

The Office Action does not clearly explain how Ogawa's stylus can be construed as emitting a light beam having a property "that *abruptly* changes" when the tip of the stylus sufficiently contacts the input surface. The Office Action appears to argue that Ogawa's stylus is configured to emit green light when the tip of the stylus is not in contact with an

input surface, the light changing to either red or blue light when the tip sufficiently contacts the input surface, citing FIGS. 18 and 19, and col. 14, line 22, col. 14, lines 36-44, and col. 14, line 45 through col. 15, line 52 for this alleged teaching. Applicants respectfully disagree with this interpretation of Ogawa.

First, Ogawa does not teach in the cited passages that the green light changes to red and/or blue light when the tip sufficiently contacts the input surface. Instead, Ogawa states that the green LED is turned on/off according to the on/off operation of the switch 21s "in response to operation of the side knob 21n". As is evident from Ogawa's FIG. 18, the side knob is disposed on the holder portion 21, and is configured for manual operation rather than for activation when the tip sufficiently contacts the input surface:



Thus, contrary to the characterization of Ogawa in the Office Action, there is nothing to suggest that Ogawa's green LED is necessarily "on" when the tip of the stylus is not in contact with the input surface, nor that it turns "off" in favor of the red or blue LED when the tip sufficiently contacts the input surface.

Second, although Ogawa does discuss light from the red and blue LEDs being associated with the stylus tip contacting the input surface, there is no *abrupt* change from one to the other. On the contrary, the outputs of these LEDs are controlled by a pressure detector 21d in an incremental fashion, and an inverting amplifier 21i is utilized in the

circuit (see FIG. 19), such that the combined output incrementally changes from red light, to a mix of red and blue light, to blue light, as writing pressure increases. *See* Ogawa at col. 14, lines 59-66, and at col. 15, lines 43-45. This incremental behavior is significant and deliberate: Ogawa relies on the variable relative amounts of red and blue light as a measure of the writing pressure exerted by the user. *See id.*, as well as the equation for "writing pressure" in box S4 of FIG. 20. Ogawa therefore teaches away from an abrupt change from red to blue light, or vice versa.

Ogawa therefore has not been shown to teach, among other features of claim 1, that a property of a light beam "abruptly changes" when the tip of a stylus sufficiently contacts an input surface. Failing to teach every element of claim 1, Ogawa cannot anticipate that claim, nor any claim dependent therefrom. The rejection of claims 1-5 and 11-16 should be withdrawn.

Regarding dependent claim 13, the Office Action asserts that "the auxiliary switch (21d)" causes an abrupt change in the light beam to simulate a condition where the tip contacts the input surface. This is incorrect for several reasons. First, the element 21d is described by Ogawa not as a switch but as a "writing pressure detector" (col. 14, lines 25-26) which has an incremental output as explained above. Second, Ogawa describes the detector 21d as controlling the red and blue LEDs in an incremental complementary fashion (not characterized by an abrupt change) to permit the measurement of writing pressure, also as explained above. Third, even if Ogawa could somehow be construed to teach that the detector 21d operates in a manner to cause an "abrupt change" in a light beam property, that operation would (by virtue of the functional relationship between the detector 21d and the stylus tip 23) be an *actual indication* of the condition where the stylus tip contacts the input surface, rather than a *simulation* of such a condition as set forth in claim 13. For this additional reason the rejection of dependent claim 13 should be withdrawn.

# Claim Rejections - § 103

The Office Action rejected claims 6-8 and 10 under 35 U.S.C. §103(a) as being unpatentable over Ogawa in view of allegedly well-known features relating to the subject

matter of claims 6-8 and 10. Applicants respectfully submit that these rejections cannot be sustained at least in view of the shortcomings of Ogawa discussed above in connection with claim 1. Withdrawal of the rejections is respectfully requested.

To the extent Applicants have not responded to any characterization by the Examiner of the asserted art or of Applicants' claimed subject matter, or to any application by the Examiner of the asserted art to any claimed subject matter, Applicants wish to make clear for the record that any such lack of response should not be interpreted as an acquiescence to such characterizations or applications. A detailed discussion of each of the Examiner's characterizations, or any other assertions or statements beyond that provided above is unnecessary. Applicants reserve the right to address in detail any such assertions or statements in future prosecution.

### Conclusion

The application is submitted to be in condition for allowance, the early indication of which is earnestly solicited.

Please continue to direct all written correspondence to 3M Innovative Properties Company. However, if the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney at the below telephone number to discuss any issues related to this case.

Respectfully submitted,

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